UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/478,624	01/05/2000	Soren Stammers	491.036US1	1920

21186   7590   06/02/2005

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402-0938

EXAMINER
KENDALL, CHUCK O

ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/478,624	STAMMERS ET AL.
	Examiner	Art Unit	
	Chuck Kendall	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>07 March 2005</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1, 3 – 8, 10 – 23, 28 – 40, & 43 - 45* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1, 3 – 8, 10 – 23, 28 – 40, & 43 - 45* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Detailed Action

1.   This action is in response to the application filed 03/07/05.

2.   Claims 1, 3 – 8,10 – 23, 28 – 40, & 43 – 45 have been amended.

Specification

3.   The use of the trademark Java has been noted in this application. It should be

capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the

proprietary nature of the marks should be respected and every effort made to prevent

their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious
> at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter
> pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1, 3, 4 – 8,10 – 13, 15 – 23, 28 – 32, 34 – 40, & 43 – 45 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Parthasarathy et al. USPN

6,347,398 B1 in view of Chatterji USPN 5,664,195

As per claims 1 & 22, Parthasarathy discloses a system, a method (col. 36), a

storage device (col.35), comprising a programmable user processing apparatus for use

by a user and at least one storage apparatus, the storage apparatus storing data

defining separate components of at least one processing application, wherein the user

processing apparatus is configured to fetch data defining components of a processing

application to be used by the user from the storage apparatus, to enable the application

to be used by the user (FIG.4, 68,74) and also wherein the user processing apparatus is

configured to arrange and test the components to verify their authenticity and/or verify

the defined interaction rules (9:33 – 47, see verifying and check digital signature, i.e.,

same as verify authenticity) and also to install the components so that components are

isolated from each other and to permit operational interaction between the components

in accordance with defined interaction rules (COM and DCOM objects which

communicatively interact between application objects and standard interfaces, see 6:25

– 40, see COM and DCOM).

Parthasarathy doesn't disclose wherein the user processing apparatus is configured

to re-fetch data defining one or more of the components in accordance with defined

rules and to use the re-fetched data for the application.

Chatterji does disclose fetching a component upon detecting that the component has

not been loaded (3:65 – 4:13, see sent-but-not-completed queue). Therefore, it would

have been obvious to one of ordinary skill in the art at the time the invention was made

to combine Parthasarathy and Chatterji because, being able to refetch or reload the

components would make the system more dynamic (Chatterji, 5:48 – 52).

As per claim 3, system according to claim 1, wherein the user processing apparatus is configured to re-fetch data defining one or more of the components in accordance with user instructions and to use the re-fetched data for the application (Parthasarathy, FIG.5, 94, also see 8:20 – 35 for request and download).

As per claim 4, a system according to claim 1, wherein the user processing apparatus is operable to store data defining at least one of the received components after the application is shut down, and to use the stored data when the application is reused by the user (Parthasarathy, 23: table, for reboot and shutdown).

As per claim 5, Chatterji, further discloses a system according to claim 4, wherein the user processing apparatus is operable to store and reuse the data in accordance with defined rules (Chatterji, 4:16 – 35, see predefined rules and also notice system refers back to the incoming-request queue which is loaded from the sent-but-not-completed queue i.e. being reused).

As per claim 6, a system according to claim 1, wherein the data defining each component defines any further components which are needed by the component, and wherein the user processing apparatus is configured to receive user instructions defining an application, to determine a first component needed for the application, to fetch the first component and identify any further components required, to fetch any further components required, and to continue identifying and fetching components until all of the components for the required application have been obtained (Parthasarathy, FIG.6, 98,100,110).

As per claim 7, a system according to claim 6, wherein the user processing apparatus is operable to determine the first component from user instructions (Parthasarathy, FIG.6, 98).

As per claim 8, a system according to claim 6, wherein the user processing apparatus is operable to determine the first component from a database of components (Parthasarathy, 15:40-45).

As per claim 10, a system according to claim 9 wherein the data defining the components includes interaction rules (Chatterji, 4:16 – 35, see predefined rules for interaction rules).

As per claim 11, a system according to claim 10, wherein the rules defined in the data defining components include rules defining functions within a component which will be made available to other components of a specified type (Chatterji, 4:16 – 35, see predefined rules and also notice system refers back to the incoming-request queue which is loaded from the sent-but-not-completed queue i.e. being reused).

As per claims 12, a system according to claim 1, wherein the user processing apparatus is configured to install the components so that the components are isolated from resources of the user processing apparatus to permit access by the components isolated resources in accordance with defined rules, (see, 6:33 – 43, OLE, object linking embedding, which uses different formats and embedded data within an object, as interpreted, also see 5: 47 – 55, for object class, attribute and type which Examiner interprets as referring to individual objects i.e. isolated objects).

As per claim 13, a system according to claim 12, wherein the user processing apparatus is configured to route each request from a component for access to a resource to a security manager, the security manager being operable to determine whether to permit the access in accordance with pre-stored rules (Parthasarathy, FIG.3, 62, see verification module).

As per claims 15 & 34, a system according to claim 14, wherein the user processing apparatus is configured to load each component into the java virtual machine using different class loader (see FIG. 4, FIG.5 and FIG.6 for component loader and class loader).

As per claim 16, a system according to claim 1, wherein the user processing apparatus is configured to provide threads to run each received component, and is further configured to manage the threads such that a component can not change a thread other than one under which it is running (Parthasarathy, 5:38, 6:10 – 20).

As per claim 17, a system according to claim 1, wherein the user processing apparatus is configured to provide threads to run each received component, and is further configured to manage the threads to prevent a component setting the priority of a thread above a predetermined level (Parthasarathy, 6:10 – 20).

As per claim 18, a system according to claim 17, wherein the user processing apparatus is configured to set the predetermined level in dependence upon the priority of the threads for running its control functions to ensure that a component cannot override a control function (Parthasarathy, 6:1 –10, for priority, see order).

As per claim 19, a system according to claim 1, wherein the user processing

apparatus is configured to test received data defining a component to determine

whether the component is from a given supplier (Parthasarathy, FIG.3, see verification

module).

As per claim 20, a system according to claim 1, wherein the user processing

apparatus is configured to test received data defining a component to determine

whether the data defining the component has been changed since it was provided by

the supplier (Parthasarathy, FIG.3, see verification module, also FIG.5, 86).

As per claim 21, a system according claim 1, wherein the user processing

apparatus is operable to use a given component in a plurality of applications

(Parthasarathy, FIG.3, 60,19:5 –15).

As per claim 23, a storage apparatus for use in a system according to claim 1,

comprising memory storing data defining at least one component of a processing

application to be transmitted to a programmable user processing apparatus

(Parthasarathy, FIG. 1, 32).

Regarding claims 28 and 40 see claim 1 for reasoning.

As per claim 29, apparatus to claim 28, wherein the loading is configured to

permit operational interaction between the components in accordance with rules defined

in received data defining the components (Chatterji, 4:16 – 35, see predefined rules for

interaction rules).

As per claim 30, apparatus according to claim 29, wherein the rules defined in

the data defining components include rules defining functions within a component which

will be made available to other components of a specified type (Parthasarathy, FIG. 6, 98).

As per claim 31, apparatus according to any of claims 28, wherein the loading means is configured to install the data so that the components are isolated from resources of the apparatus, and to permit access by the components to the isolated resources in accordance with defined rules (Parthasarathy, FIG.4, 72).

As per claim 32, apparatus according to claim 31, wherein the load is configured to route each request from a component for access to a resource to a security manager, the security manager being operable to determine whether to permit the access in accordance with pre-stored rules (Parthasarathy, FIG.4, 72).

As per claim 35, apparatus according to claim 28, wherein the receiving means is operable to receive data defining a component from a storage medium (Parthasarathy, FIG.1, 32).

As per claim 36, apparatus according to claim 28, wherein the receiver is operable to receive data defining a component transmitted as a signal from an external apparatus (Parthasarathy, FIG.5, 94).

As per claim 37, Apparatus according to claim 28 wherein the loading means is operable to use a given component in a plurality of applications (Parthasarathy, FIG.3, 60,19:5 – 15).

As per claim 38 and 45, see claim 1 for reasoning.

As per claim 39, a storage device storing instructions for causing a

programmable processing apparatus to become configured as an apparatus as claimed

in claim 28 (Parthasarathy, FIG.4, 68).

As per claim 43, programmable processing apparatus for use in a system

according to claim 1, comprising: means for downloading data defining a plurality of

separate components of a processing application from one or more external apparatus

when the programmable processing apparatus is connected to the external apparatus

(Parthasarathy, 8:25 – 35); and

means for installing the received components to enable the application to be

used a user (Parthasarathy, 8:45 – 47).

As per claim 44, a storage apparatus for using a system according to claim 1,

comprising memory means storing data defining at least one component of a

processing application to be transmitted to a programmable user processing apparatus

(Parthasarathy, FIG.7A, 124,122).

6.   Claims 14 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Parthasarathy et al. USPN 6,347,398 B1 in view of Chatterji USPN 5,664,195 as

applied in claims 9 and 28, and further in view of Dale et al. USPN 6,049,664.

As per claims 14, & 33 Parthasarathy as modified by Chatterji discloses all the

claimed limitations as applied in claims 9, & 28 above. The combination of

Parthasarathy and Chatterji doesn't explicitly disclose wherein the user processing

apparatus is provided with a Java virtual machine and is arranged to load each

component into the Java virtual machine. However, Dale does disclose in an analogous

art dynamically downloading components as needed (5: 10 –13) in a java environment including a JVM. (5:22 – 27, also see 6: 22 – 27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Parthasarathy and Chatterji with Dale because, it would enable needed JVM components to be loaded dynamically.

Response to Arguments

7.   Applicant's arguments with respect to claims 1, 3 – 23, 28 – 40, 43 – 45 have been considered but are moot in view of the new ground(s) of rejection.

However in reference to Applicants argument on page 10 – 11, of Applicants response 3/7/05, with regards to defined interaction rules, Applicant argues and claims a limitation not properly defined in claims, and although specification does disclose defined interaction rules Examiner cannot pull definitions from the specifications into the claims to distinguish Applicants disclosure from the Prior art, hence any arguments or limitations regarding defined interaction rules will not be considered at this time and are hence moot.
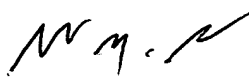
Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chuck Kendall whose telephone number is 571-

2723698. The examiner can normally be reached on 10:00 am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tuan Dam can be reached on 571-2723695. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

WEI Y. ZHEN
PRIMARY EXAMINER